

Secondary silicified oil reservoirs of Bashkirian carbonate successions of southeast of the Republic of Tatarstan

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Abstract

Secondary silicified reservoirs were studied from east flank of Melekesskaya depression and west side of South-Tatarian arch in Bashkirian carbonates succession. Silicified reservoirs in carbonates are located in dome part of oil-saturated structures, above zones of alluvial erosion rocks in Visean successions. Process of cementation by silica affect only lower parts of oil-saturated intervals and decrease from bottom to top along of oil reservoir. The model of forming silicified reservoirs was suggested. Fluid flows migrated via Visean alluvial erosion successions and were enriched silica components. Next step is precipitation of silica cement on acid geochemical barriers in oil-water contacts.

Keywords

Bashkirian time, Diagenesis, Hydrocarbons, Petro physical properties, Secondary silicified oil reservoirs